

REMARKS/ARGUMENTS

Claims 31-50 are pending. Claims 34, 41, and 47 have been amended to remove reference to unsubstituted purines and pyrimidines.

Claims 31-50 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly not conveying to one skilled in the art that applicants had possession of the claimed invention at the time of filing. In particular, the Office Action alleges that the instant claims read on a “virtually unlimited number of compounds” (page 3) and that Applicants do not provide disclosure to support the scope of the claims (pages 3-5). Applicants traverse this rejection.

First, the compositions recited in the Applicants’ method claims are of limited scope. The instant claims are limited to purines and pyrimidine heterocyclic scaffolds. The scope is further limited by the requirement that the scaffold have at least two functionalizable atoms. This scope is not “virtually unlimited” and would be understood by one skilled in the art.

Second, the scope of the claims is supported by the filed application. To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *See, e.g., Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991). An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, diagrams, and formulas that fully set forth the claimed invention. *See Lockwood v. American Airlines, Inc.*, 107 F.3d 1656, 1572 (Fed. Cir. 1997). There is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. *See In re Wertheim*, 541 F.2d 257, 263 (C.C.P.A. 1976). The heterocyclic scaffolds and substituents are described, for example, in words at page 10, line 9 to page 15, line 31 and in the 117 examples, and further by the schematics shown on pages 27-55. These “words, structures, diagrams, and formulas” fully set forth the claimed invention. Thus, the disclosure clearly shows that Applicants were in possession of the subject matter of the instant claims. As such, reconsideration and withdrawal of the rejection is requested.

Claims 34, 41, and 47 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. This rejection is believed to be moot in view of the amendments to claims 34, 41, and 47.

Claims 31, 32, 34-36, 38, 39, 41-43, and 45-49 stand rejected under 35 U.S.C. § 102(a) as allegedly anticipated by PCT Patent Application No. WO 96.33972 (the Gordeev reference). A reference cannot anticipate a claim, however, unless it discloses “every element as set forth in the claim . . . either expressly or inherently described.” *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631 (Fed. Cir. 1987); MPEP § 2131. “The identical invention must be shown in as complete detail as is contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989); MPEP § 2131.

In instant claim 31, a purine or pyrimidine scaffold having at least two functionalizable atoms, at least one of which is blocked, is provided. The scaffold is reacted with a mixture of chemical substituents. At least one blocking group is then removed from the substituted scaffold, and the deblocked scaffold is reacted with a mixture of chemical substituents to produce the product. The Gordeev reference, in contrast, takes a mixture of amino acid precursors and reacts them to produce their respective guanidine derivatives (see the Summary of the Invention on pages 7-16 and pages 81-84). Unlike the Gordeev reference, claim 31 *begins* with a purine or pyrimidine scaffold and appends substituents thereto. Thus, the cited art does not disclose every element as set forth in instant claim 31. This argument applies equally to independent claims 39 and 45 and the pending dependent claims. For at least this reason, Applicants submit that the § 102(a) rejection should be withdrawn.

Claims 31-50 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over the Gordeev reference and Bioorg. Med. Chem. Lett. 1994, 4, 2821-24 (the Smith reference). As discussed above the Gordeev reference lacks elements of each rejected claim. Nothing in the

DOCKET NO.: ISIS-5031
Application No.: 10/087,424
Office Action Dated: April 10, 2003

PATENT

Smith reference overcomes, or is alleged to overcome, these deficiencies. As such, Applicants respectfully request reconsideration and withdrawal of the rejection.

Applicants believe that the claims presently before the Examiner patentably define the invention over the art of record and are otherwise in condition for ready allowance. An early Office Action to that effect is, therefore, earnestly solicited.

Respectfully submitted,

Date: July 2, 2003

John A. Harrelson, Jr.
John A. Harrelson, Jr.
Registration No. 42,637

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439